

REMARKS

Claims 1-4 and 6-12 are pending.

Claims 1-4, 7 and 8 stand rejected.

Claims 6, 11 and 12 are allowed.

Claims 9 and 10 are objected to.

Claims 1-3 and 6 and 8-12 have been amended

Claim 4 has been cancelled without prejudice.

Claim 13 has been added.

No new matter has been added.

Claims 1-3 and 6-13 are hereby submitted for reconsideration.

In the Office Action, the Examiner has rejected claims 1, 2, 4 and 7-8 under 35 U.S.C. § 103(a) as being obvious over De Buyst (EP 1,206,024 A1) in view of Schuyler (U.S. Patent No. 2,901,725). Independent claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Eckert (U.S. Patent No. 5,630,735) in view of De Buyst. Claim 3 is rejected as being unpatentable over De Buyst in view of Auclair (U.S. Patent No. 6,325,678 B1). Applicants note that the Examiner has allowed independent claims 11 and dependent claims 6 and 12. Also, the Examiner has indicated that claims 9 and 10 would be allowable if re-written in independent format.

Applicant respectfully submits the following remarks in response.

Regarding the amendments to allowed claims 11, 6 and 12 Applicants have amended these claims to ensure that the language of claim covers the intended scope of the invention. Because no changes were made to the portion of the claim regarding the

recessed notch, which the Examiner has indicated is not shown in the prior art, these claims should remain allowed for the same reasons.

Turning to the rejected claims, independent claim 1 of the present invention, which is rejected over De Buyst in view of Schuyler, is directed to a connection assembly for connecting two medium-voltage electrical power cables where each power cable includes at least one conductor surrounded by an insulative jacket.

The connection assembly has a connector comprised of tubular contacts adapted to connect together stripped ends of the conductors inserted into the tubular contacts and retained in the tubular contacts by means of screws. The screws directly contact the stripped ends of the conductors.

At one end at least, extension means, formed as a rigid annular flange extending away from the periphery of the connector, and unitarily constructed with the connector are adapted to cover a portion of the insulative jacket of the cable over a length greater than 10mm.

In this arrangement the extension means is formed as a circular protruding rim or edge as shown in cross sectional figure Fig. 1 of the present invention.

The cited prior art, namely DeBuyst shows connector with contacts for receiving a conductor. The Examiner has argued that the portion of the connector outward of the screws amounts to an extension means within the meaning of claim 1 and has provided an illustration to that effect. However, this portion of the extension means is not formed as a rigid annular flange extending away from the periphery of the connector, but rather is simply a regular portion of the connector itself. Such a section is not a flange (rim or edge) extending from the periphery of the connector.

Application No. 10/650,483
Amendment dated April 18, 2005
Reply to Office Action dated January 18, 2005

In combination with DeBuyst, the Examiner also sites to the Schuyler reference. However, this reference also fails to show an extension means formed as a rigid annular flange. First, as illustrated in Fig. 1 of Schuyler, the connector is formed in two separate halves, which, even when compressed, still has a horizontal opening along the entire length of the connector. As such, it can not possibly form an annular (circular) flange.

Second, the portion of the connector after the screws which the Examiner has referred to in the rejection as extending for greater than 10mm, does not constitute a rigid annular flange. Similar to the DeBuyst reference, the portion outward of the screw in Schuyler is simply more of the connector body and is not a flange (rim or edge) extending away from the periphery of the connector.

For at least these reasons, Applicants respectfully submit that the cited prior art, namely DeBuyst and Schuyler, either alone or in combination with one another, fail to teach or suggest the present invention as claimed. For example, there is no teaching or suggestion in either reference that discloses an extension means formed as a rigid annular flange extending away from the periphery of said connector.

As such, Applicants respectfully request that the rejection of independent claim 1 be withdrawn. Furthermore, as claims 2-3, 7-10 depend therefrom, these claims should all be allowed for at least the same reason.

In a separate rejection, the Examiner has rejected claim 1, as being unpatentable over Eckert. The Eckert reference shows a connection between two electrical conductors. However, unlike the present invention there is no showing in Eckert for an extension means formed as a rigid annular flange extending away from the periphery of the connector. As with both the DeBuyst and Schuyler references, in Eckert, the area of the

Application No. 10/650,483
Amendment dated April 18, 2005
Reply to Office Action dated January 18, 2005

connector outward of the screws is not a ridge or edge that extends from the connector body but rather is simply more of the solid and block like connector body.

Furthermore, the Eckert reference does not show the screws contacting the exposed conductor, but instead shows the screws contacting the insulated portion of the wire. The Examiner notes this, but states in the Office Action that the conductor is not positively recited and the screws are capable of contacting the bare conductor, even if it is not directly shown. Applicants respectfully disagree.

Claim 1 positively recites the limitation of tubular contacts adapted to connect together stripped ends of said conductors inserted into said tubular contacts and retained in said tubular contacts by means of screws, with the screws directly contacting the stripped ends of the conductors.

On the other hand, in Eckert not only are the screws not shown in direct contact with the stripped ends of the conductor, but in fact the Eckert reference teaches away from the screws directly contacting the stripped ends of the conductor.

For example, the background section of Eckert in column 2, lines 1-13 states:

“While the above-described sleevelike connector devices are better than wire nuts and/or the crimp type connector for many applications, they are not fully versatile in that they can be used to connect only electrical conductors having a solid conductor wire against which a screw can be securely tightened. Additionally, although these devices are designed to be used with insulated screws or metal screws with insulating plugs, the direct contact of the screws against the live conductors presents a danger which may not be acceptable in many high-voltage applications. Moreover, when a screw is removed, intentionally or unintentionally, the conductor is exposed through the screw apertures, presenting an additional danger to the user and/or the surroundings.” (emphasis added)

From this description, it is clear that one of the chief design components of Eckert is for the screws *not to contact* the stripped ends of the conductor. Therefore, the Eckert

Application No. 10/650,483
Amendment dated April 18, 2005
Reply to Office Action dated January 18, 2005

reference does not teach a screw capable of contacting a stripped end of a conductor.

Furthermore, also for this reason, there is no motivation to combine the Eckert with a reference that shows the screws contacting the stripped end of the conductor. As such, the teachings of Eckert can not be combined with the DeBuyst reference used by the Examiner or with any other such references where the screws contact the stripped end of the conductor, as Eckert clearly teaches away from such a combination.

For at least these reasons, Applicants respectfully submit that the cited prior art, namely Eckert and DeBuyst, either alone or in combination with one another, fail to teach or suggest the present invention as claimed. For example, there is no teaching or suggestion in either reference that discloses an extension means formed as a rigid annular flange extending away from the periphery of said connector. Furthermore, there is no teaching or suggestion in Eckert for the screws directly contacting the stripped ends of the conductor.

As such, Applicants respectfully request that the rejection of independent claim 1 be withdrawn. Furthermore, as claims 2-3, 7-10 depend therefrom, these claims should all be allowed for at least the same reason.

On a separate note, Applicants have added a new independent claim 13 to the application. In this claim, the present invention is directed to a connection assembly with a connector such that at least one end, extension means extend from the periphery of the connector and are adapted to cover a portion of the insulative jacket of the cable over a length greater than 10mm. The extension means is a flexible semiconductor rubber skirt, such that when the power cables are placed in the connector, *the extension means remain fixed to and located over only a portion of the periphery of the connector.*

Application No. 10/650,483
Amendment dated April 18, 2005
Reply to Office Action dated January 18, 2005

In this configuration, the rubber skirt extension means is significantly reduced in size and complexity and is located only over a small portion of the periphery of the connector. As noted in the last paragraph of page 3 of the specification and in the first paragraph of page 4, prior art arrangements such as those found in DeBuyst, require the rubber connector to not be fixed and instead be threaded over the cable and then pushed back over the entire connector in order to secure and complete the connection. This configuration and accompanying connection process greatly increasing the time and difficulty in securing the connection. Unlike prior art arrangements, the present invention as claimed in claim 13 indicates that the extension means is *fixed to* and located *only at* the periphery of the connector.

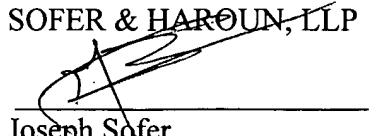
For at least this reason, Applicants respectfully request that none of the rejections of the other independent claims be carried over to this new independent claim 13.

In view of the foregoing, Applicants respectfully submit that the present invention as claimed in claims 1-3, 6-13 is now in condition for allowance, the earliest possible notice of which is earnestly solicited. If the Examiner feels that a telephone interview would advance the prosecution of this application he is invited to contact the undersigned at the number listed below.

Respectfully submitted

Dated: 4/18/05

By:

SOFER & HAROUN, LLP

Joseph Sofer
Reg. No. 34, 438
317 Madison Avenue
Suite 910
New York, New York 10017
(212)697-2800